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### (3) Remarks

Applicants' previous amendment canceled claims 23 through 27 and presented new claims 43-45, which were fully described in the original disclosure and eliminate some of the issues presented against other claims in the parent application. Here, claim 43 is amended responsive to the examiner's objection. No other claims are added, canceled or amended.

All of claims 1-22 and 28-45 are believed to be allowable in the application and over the prior art.

It will be recalled that the present invention is directed to control valves in which flow capacity may be easily varied and controlled. In one embodiment, the invention involves a ball valve (FIG 1, 3) and a disk (FIG 2, 8), wherein the disk has a specially shaped opening (FIG 3, 10), such that the opening in the disk interacts with the passage through the ball valve (FIG 1, 4) in such a way that desired flow characteristics are achieved. See col. 4, lines 37-45. For example, by use of an appropriately shaped opening in the disk, it is possible to achieve equal percent flow through the passage in the valve as the ball is turned from an open to a closed position. See col. 6, lines 18-19.

Applicants renew their requests that the application be placed in interference with U.S. Patent 5,937,890.

Claims 1-9, which are the claims from applicants' original patent, U.S. Patent 6,039,304, referred to herein as the '304 patent, stand allowed.

The claims copied for the purpose of interference, namely claims 10-42, have all been rejected but are allowable for the reasons presented herein.

Claims 43 through 45, which were presented in applicants' last paper, eliminate some of the bases for rejection in the earlier claims and should not be rejected for the same reasons as the earlier claims.

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**(1) The requirement for corrected drawing sheets is in error.**

The examiner has required that applicants present new drawings illustrating various features set out in the claims and allegedly not shown in the drawings. This requirement is in error and applicants request that it be withdrawn.

Applicants first note that the purpose of this application is to have an interference declared between the present case and the noted patent. Because the purpose of the reissue statute is to correct errors, it is to be interpreted liberally and technicalities should not be used to deny an applicant rights easily correctable. See, generally, *Brenner v. State of Israel*, 400 F.2d 789, 158 USPQ 584 (D.C. Cir. 1968).

Applicants note further that the reason why MPEP §608.02 indicates that ink sketches should be required is to determine if they contain new matter. Here, the examiner has already concluded that the claim limitations mentioned constitute new matter, so the requirement is one that the examiner cannot reasonably make because the issue of new matter – an appealable issue – has already been raised and the submission of new drawings would be an empty gesture.

The specific claim limitations mentioned here are fully supported in the specification as fully set out below. In the alternative, where immaterial to the issue of patentability as pointed out below, they should not be made the basis of an objection in a reissue proceeding, especially prior to the determination of the main issues, which are appealable, not petitionable as would be the current issue if the requirement is made final.

Applicants contend that the drawings are fully acceptable in their current form, and point specifically to the following points as to the claim limitations identified by the examiner:

- i) "the connector on the insert member" - (claims 10-17, 19, 20, 30-32 and 42) see Figure 8 and the flange (unnumbered) on disk 8. Applicants note that the claims don't call for nor can they reasonably be interpreted as calling for a single connector, unassociated with other parts not claimed.

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Applicants' specification describes a flange used in conjunction with another means. This flange is equivalent in its function as a connector with the embodiment depicted in Fig. 6 of the '890 patent, wherein element 318, a volume control insert, relies on external means (not shown) for connection. Amendment of the drawings is not

- ii) "the insert member attached to the valving member" (claims 10-17, 19, 30, 32 and 42) - The term "attach" should be given the broadest reasonable interpretation during prosecution. This is a feature not patentably distinct (and therefore not material) from the embodiment in applicants' disclosure wherein the attachment of the insert member is to the valve body.
- iii) "the insert member attached to the valve seat" - (claims 20, 31 and 38)  
Again, The term "attach" should be given the broadest reasonable interpretation during prosecution, and even if not literally shown, this is a feature not patentably distinct (and therefore not material) from the embodiment in applicants' disclosure wherein the attachment is to the valve body.
- iv) "the insert member having a parabolic opening" (claims 17, 22, 28-38, 41 and 42) - The patent uses the term "parabolic" and applicants should not be held to a more technical definition than used in the '890 patent. The term "parabolic" should be given the broadest reasonable interpretation during prosecution. applicants' description describes the insert opening being shaped to achieve "equal percent" flow characteristics: the same effect achieved by the '890 patent with its "parabolic" opening. The '890 patent itself does not illustrate a true parabolic curve and in its description indicates that the opening is "parabolic in that the height  $h$  of opening 246 (Fig. 5B) changes across its width  $w$ , unlike the oblong opening 146 (Fig. 4) which has a substantially constant height. Similar to the oblong opening 146 above, the parabolic opening 246 provides improved volume control over a conventional ball valve, and in particular provides an equal

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percentage flow characteristic which is preferred in automatic temperature control systems." (col. 7, lines 3-10)

- v) "the insert members are made of plastic" (claim 15) - Again, these limitations are not material to patentability and are understood by those skilled in the art to be included in any description of valving materials, especially where the disclosure calls for a "semi-resilient material" (col. 5, line 66). Note the examiner agrees that the choice of materials is within the general skill of a worker in the art, Office Action of December 19, 2000, at page 7, paragraph 1.
- vi) "the inserts having a diameter corresponding to the diameter of the bore of the valving member" (claims 13 and 14) - In this regard, see Fig. 1 of applicants' description, which shows an insert 8 having several diameters, at least one of which has "a diameter corresponding to the diameter of the bore of the valving member".
- vii) "the valving member and connectors of the insert members comprising cooperating legs and pockets" (claim 11) - Again, these limitations are not material to patentability.
- viii) "a portion of the valve seat extending across the fluid passage and having an elongate opening" (claims 39 and 40) - Again, these limitations are not material to patentability.
- ix) "a connector on a periphery of the insert, the connector being adapted to position and secure the insert member across a passage through the valving member (claims 43-45).

Correction of the drawings is not an inexpensive matter and should not be freely required as a petitionable matter on issues subject to determination by the Board of Appeals.

Accordingly, no new or corrected drawings should be required at this stage.

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**(2) The rejection under 35 U.S.C. §251 for new matter is in error.**

The new matter rejections of claims based on immaterial limitations not relevant to patentability are improper where the claims have been copied to provoke an interference. This rejection is in error for all of the reasons presented earlier.

As to the claims which are deemed to contain new matter, (claims 10-17, 19, 20, 22 and 28-45) the examiner has identified certain limitations in these claims which he contends are lacking in applicants' specification. The claim terminology, the claims in which such terminology is found, and applicants' position regarding the support for such terminology is set forth below:

- i) "the connector on the insert member" - (claims 10-17, 19, 20, 30-32 and 42) see Figure 8 and the flange (unnumbered) on disk 8. Applicants note that the claims don't call for nor can they reasonably be interpreted as calling for a single connector, unassociated with other parts not claimed. While applicants' specification does not show a sole connector either, it does show a flange used in conjunction with another means. This flange is equivalent in its function as a connector with the embodiment depicted in Fig. 6 of the '890 patent, wherein element 318, a volume control insert, relies on external means (not shown) for connection.
- ii) "the insert member attached to the valving member" (claims 10-17, 19, 30, 32 and 42) - The term "attach" should be given the broadest reasonable interpretation during prosecution. Even assuming this limitation is not literally shown, this is a feature not patentably distinct (and therefore not material) from the embodiment in applicants' disclosure wherein the attachment of the insert member is to the valve body.
- iii) "the insert member attached to the valve seat" - (claims 20, 31 and 38)  
Again, The term "attach" should be given the broadest reasonable interpretation during prosecution, and even if not literally shown, this is a feature not patentably distinct (and therefore not material) from the

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embodiment in applicants' disclosure wherein the attachment is to the valve body.

- iv) "the insert member having a parabolic opening" (claims 17, 22, 28-38, 41 and 42) - The patent uses the term "parabolic" and applicants should not be held to a more technical definition than used in the '890 patent. The term "parabolic" should be given the broadest reasonable interpretation during prosecution. applicants' description describes the insert opening being shaped to achieve "equal percent" flow characteristics: the same effect achieved by the '890 patent with its "parabolic" opening. The '890 patent itself does not illustrate a true parabolic curve and in its description indicates that the opening is "parabolic in that the height *h* of opening 246 (Fig. 5B) changes across its width *w*, unlike the oblong opening 146 (Fig. 4) which has a substantially constant height. Similar to the oblong opening 146 above, the parabolic opening 246 provides improved volume control over a conventional ball valve, and in particular provides an equal percentage flow characteristic which is preferred in automatic temperature control systems." (col. 7, lines 3-10)
- v) "the insert members are made of plastic" (claim 15) - Again, these limitations are not material to patentability and are understood by those skilled in the art to be included in any description of valving materials, especially where the disclosure calls for a "semi-resilient material" (col. 5, line 66). Note the examiner agrees that the choice of materials is within the general skill of a worker in the art, Office Action of December 19, 2000, at page 7, paragraph 1.
- vi) "the inserts having a diameter corresponding to the diameter of the bore of the valving member" (claims 13 and 14) - In this regard, see Fig. 1 of applicants' description, which shows an insert 8 having several diameters, at least one of which has "a diameter corresponding to the diameter of the bore of the valving member".

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- vii) "the valving member and connectors of the insert members comprising cooperating legs and pockets" (claim 11) - Again, these limitations are not material to patentability.
- x) "a portion of the valve seat extending across the fluid passage and having an elongate opening" (claims 39 and 40) - Again, these limitations are not material to patentability.
- xi) "a connector on a periphery of the insert, the connector being adapted to position and secure the insert member across a passage through the valving member (claims 43-45).

Applicants respectively urge that the examiner is applying an improper standard. None of the limitations identified by the examiner is material to patentability. This is apparent from the final rejection of all copied claims over prior art. The examiner dismisses applicants' arguments regarding new matter and supporting disclosure by saying that the "argument that a claim limitation should be considered disclosed if not disclosed (but considered obvious) is not persuasive". However, for purposes of provoking an interference, applicants are equitably permitted to suggest counts (copy claims) which contain limitations not found in their disclosure, so long as the limitations are not material to patentability. See 37 C.F.R. 1.606. If the examiner disagrees with applicants' position as to the presence of supporting disclosure in applicants' underlying patent for certain of the limitations found in Appellants' copied claims, it is incumbent upon the examiner to suggest alternative counts. See generally the MPEP at 2305.

Applicants' are here being placed in an inequitable situation by the rejection which bases lack of support on immaterial limitations, when it is clear that a claim without them could be suggested by the examiner, the person best able to make the determination. The fact that the question of what claims to suggest is of great importance should not overshadow the fact that applicants' claims -- minus immaterial limitations -- could form the basis of an interference count of the type contemplated by the MPEP for suggestion by an examiner.

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As an example of such a count which would be free from the examiner's rejections/objections, note that pending claim 19 is presently under rejection for the reason that it contains the limitation

"wherein said valving member and said plurality of inserts include a connector for attaching one of said plurality of inserts to said valving member across said bore."

The examiner argues that this limitation is unsupported by applicants' specification. applicants have responded that this limitation does not involve a patentability distinct feature. Note, however, that even if applicants are not permitted to copy the above quoted claim limitation, present claim 19 without the quoted limitation would constitute a proper interference count.

Similarly, claim 27 with the final limitation

"wherein said valving member and said plurality of inserts include a connector for attaching one of said plurality of inserts to said valving member across said bore; said connector comprising cooperating legs and pockets, said legs and pockets being formed in said valving member and said plurality of inserts",

would also constitute a proper interference count, broader than the corresponding claim in the issued patent yet fully supported by applicants' disclosure, were the quoted limitation deleted. The claim would then be free from the asserted new matter objection, which is based on what is in applicants' view a limitation which does not involve a patentable feature.

In interference practice it is correct and equitable to have a count which is broader than any of the claims in the patent with which an applicant is attempting to provoke the interference. The above are examples of such counts. See generally 37 C.F.R. §§ 1.606 and 1.607.

The examiner fully recognizes that there is overlapping claimed subject matter as between the Mirandi patent claims and at least some of those copied claims in the reissue application. In particular, the examiner has not rejected claims 18 and 21 under 35 U.S.C. § 112 as containing new matter. Thus, the examiner clearly concurs with applicants that



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for at least these claims there is support in applicants' specification. However, the examiner has refused to declare an interference as to those claims by contending that those claims may be rejected based on the "recapture doctrine". A previous final rejection over prior art has been canceled.

**(3) The rejection under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement, is in error.**

The statement of this rejection sets forth exactly the same bases as the one above based on 35 U.S.C. §251 for new matter.

This rejection is in error for all of the reasons presented above and in applicants' earlier papers.

**(4) The rejection under 35 U.S.C. §251 for improper recapture of surrendered subject matter is in error.**

The examiner has rejected claims 18 and 21 under 35 U.S.C. §251 as being improper recapture of broadly claimed subject matter surrendered during prosecution of the application for the patent upon which the present reissue is based.

This rejection is in error for all of the reasons presented earlier.

In the appeal brief presented by applicants' in the parent file, the point was argued in accord with the decisions of the Court of Appeals for the Federal Circuit, also cited by the examiner and the Board of Appeals. The Board of Patent Appeals and Interferences remanded the case to the examiner for consideration of the effect of its decision in *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential). Applicants maintain their position that a recapture rejection is improper where the claims involved are narrower in some respects and broader in other respects than are the claims in the issued patents.

The Board's decision in *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential). (if the reissue claim recites a broader form of the key limitation added/argued during original prosecution to overcome an art rejection (and therefore not

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entirely removing that key limitation), then the reissue claim may not be rejected under the recapture doctrine.) is helpful to applicants here and contrary to the examiner's position. The MPEP, at §1412.02, points out, for example, that "if the key limitation added to overcome an art rejection was "an orange peel," and the reissue claim instead recites "a citrus fruit peel", the reissue claim may not be rejected on recapture grounds." This is very close to the fact pattern here where applicants' claims fall into the circle of limitations illustrated by *Eggert* as between the subject matter of the issued claim and that of the rejected claim. The Board in *Eggert* found an inner range or circle of subject matter permissible where it had not been conceded as unpatentable even though within the original scope of a subsequently amended and allowed claim. Their basis was that appellants had never conceded that that subject matter was unpatentable, and it was, therefore, not barred by the recapture rule.

In the present case, the examiner asserts that during the prosecution of the '304 patent the Appellants' introduced the following language into what ultimately became claims, 1, 4 and 6:

"wherein at least one of the casing openings forms a groove" and "an internal retaining ring sized and shaped to fit at least partially inside the groove, wherein the disk is retained by internal retaining ring which is at least partially recessed into the groove in one of the casing openings"

This limitation, thus, forms the inner ring in the Drawing 1 referred to by the Board in *Eggert*. However, based on the addition of this claim limitation, the examiner here contends that presently pending claims 18 and 21 are broader in scope than the patented claims because no particulars of the attachment are set forth in these pending claims. The examiner contends that the claim limitation "attachable across said fluid passage" in claims 18 and 21 is broader than the detailed recitations of the groove and retaining ring and represents an improper recapture of previously claimed subject matter which was surrendered in the application for the patent upon which the present reissue is based. However, this analysis overlooks the Board's rationale in *Eggert* that there may be ground included within the original claim scope that has not been conceded as unpatentable by adoption of a narrowing amendment without appeal.

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Here, even if one were to agree that the language in claims 18 and 21 is broader in terms of attachment means than is the limitation now employed in claims 1, 4 and 6, the recapture analysis should not end here but take into account the *Eggert* analysis.

Importantly, clearly the intent of this Reissue application is to provoke an interference – not to recapture a limitation previously inserted in order to obtain the allowance of the '304 patent. Someone other than applicants have been given the claims applicants now seeks and an interference is the correct procedure for remedying that situation.

Moreover, claims 18 and 21 contain limitations not found in issued claims 1, 4 and 6. Making claims 18 and 21 narrower in some respects than were the claims which were amended in the original application. This is fully consistent with and would not be barred under the *Eggert* analysis.

Applicants believe that the recapture doctrine is clearly inapplicable here and is not consistent with the controlling case law. Recapture does not automatically apply and has developed in the straight reissue context, not to prevent an otherwise appropriate interference.

The recapture doctrine is intended to preclude an applicant from obtaining reissue claims which are of the same scope as claims which the applicant may have conceded were unpatentable by virtue of amendments made during the prosecution of the issued patent. The leading case explaining and applying the recapture doctrine is *Ball Corp. v. United States*, 729 F.2d 1429, 221 U.S.P.Q. 289 (Fed. Cir. 1984), which was indeed cited and relied upon by the examiner. A reading of *Ball* makes clear, however that application of the recapture doctrine is unwarranted here.

Applicants amended their claims in now issued U.S. Patent 6,039,304 to insert a claim limitation directed to means for holding in place the disk which controls flow through the ball valve passage. However, the now pending claims, against which recapture is asserted, are not equal in scope to the pending claims to which applicants

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added the referenced limitation in the issued patent. Rather, pending claims 18 and 21, against which the examiner has asserted recapture, are narrower in some respects and broader in other respects than were applicants' initial claims. *Ball*, as well as the other cases cited by the examiner, *In re Clement*, 131 F. 3d 1464, 45 U.S.P.Q. 2d 1161 (Fed. Cir. 1997) and *Hester Industries, Inc. v. Stein, Inc.*, 142 F. 3d 1472, 46 U.S.P.Q. 2d 1641 (Fed. Cir. 1998), hold that in such circumstances recapture does not automatically apply.

As explained in *Ball*, the recapture doctrine is intended to prevent applicants from using the reissue procedure as a substitute for appeal. In other words, applicants should not, in lieu of appeal, be permitted to cancel claim limitations to secure allowance and then file for reissue to try to secure claims of the original scope. Rather, as *Ball* states, "Reissue is an extraordinary procedure and must be adequately supported by the circumstances...". 221 U.S.P.Q. at 293. The circumstances here are not in dispute. Applicants filed this reissue for the clear and obvious purpose of provoking an interference, not to remove a particular claim limitation from their issued patent. In *Eggert* the Board proposed a clear guide for assessing recapture consistent with the precedent of the CAFC, and application of that guide to the present facts will show that a rigid application of the recapture doctrine is not in accord with the spirit of reissue law.

In *Ball* the CAFC rejected rigid application of the recapture doctrine, and emphasized that recapture was an equitable doctrine, requiring analysis of particular factual situations. In *Ball* the CAFC permitted a reissue applicant to proceed with claims which were narrower in some respects and broader in other respects than were the claims in the issued patent. Clearly, applicants' claims 18 and 21 are claims which the *Ball* Court would not have rejected based on recapture.

Equitable factors here dictate that the recapture doctrine not be applied. In addition to the circumstance that this reissue was filed for the sole purpose of provoking an interference and not to reargue prior art, the prior art here at issue is not even the same art as was applied against applicants' claims in their original patent application.

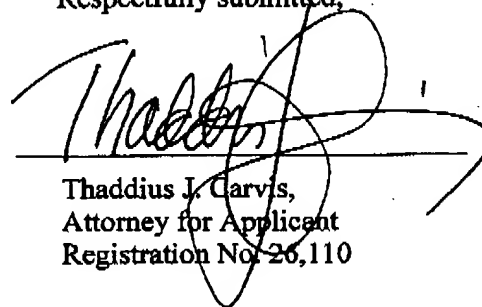
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Accordingly, the very cases cited by the examiner on the issue of recapture do not support, and in fact are at odds with, the present recapture rejection.

Accordingly, reconsideration and allowance of all claims are believed in order and are requested.

Respectfully submitted,



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